

## **Mapping Public Housing: The Case of New York City**

Elvin Wyly  
The University of British Columbia \*

James DeFilippis  
Rutgers University

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\* Corresponding author: Elvin Wyly, Urban Studies Program and Department of Geography, The University of British Columbia, 1984 West Mall, Vancouver, BC V6T 1Z2, Canada, telephone 778 899 7906, e-mail ewyly@geog.ubc.ca. We are grateful to Anthony Orum and the anonymous referees for comments on a previous version of the manuscript, and to Eric Leinberger at the University of British Columbia for his cartography.

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In American popular discourse and policy debates, “public housing” conjures an image of “the projects” -- dysfunctional neighborhood imprints of a discredited welfare state. Yet this image, so important in justifying deconcentration, is a dangerous caricature of the diverse places where low-income public housing residents live, and it ignores a much larger public housing program -- the \$100 billion-plus annual mortgage interest tax concessions to (mostly) wealthy homeowners. In this paper, we measure three spatial aspects of assisted housing, poverty, and wealth in New York City. First, local indicators of spatial association document a contingent link between assistance and poverty: vouchers are not consistently associated with poverty deconcentration. Second, spatial regressions confirm this result after controlling for racial segregation and spatial autocorrelation. Third, factor analyses and cluster classifications reveal a rich, complex neighborhood topography of poverty, wealth, and housing subsidy that defies the simplistic stereotypes of policy and popular discourse.

*Key words:* housing-affordable; housing-public; urban policy; New York City

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“Public housing ... represents a federally funded, physically permanent institution for the isolation of black families by race and class, and must be considered an important structural cause of concentrated poverty in U.S. cities.”

Douglas Massey and Shawn Kanaiupuni (1993, p. 120)

“Though concentrated poverty is clearly a larger phenomenon than concentrated public housing ... U.S. deconcentration policy, nevertheless, has been focused primarily on the dispersal of subsidized families.”

Ed Goetz (2003, p. 40).

“Americans typically associate the phrase ‘housing subsidy’ with the poor. They think of public housing projects, homeless shelters or perhaps rent vouchers.... But the largest housing subsidies are much more invisible. These are subsidies that come through the tax code. ... about three-fourths of wealthy Americans -- many living in very large homes -- get housing subsidies from Washington in the form of tax breaks. ...[But] few politicians, journalists, or other opinion-makers worry about getting wealthy mansion-dwellers off government ‘welfare.’”

Peter Dreier (2006, p. 106, 105)

The phrase “public housing” evokes a powerful iconography in America. Social science research, print and television journalism, policy debates and political campaigns, and cinema have together created a stark composite image in the American imagination: dysfunctional “project” landscapes of severe, intergenerational poverty that promote dependency, illegal behavior, and personal irresponsibility. Easily summarized and easily understood as a simple equivalence (public housing = underclass poverty), this image became so pervasive and so powerful by the early 1990s that the smallest of programs became the largest of targets. Public housing has always been a small, marginal, and perpetually underfunded program without the status of a fully-funded entitlement, and without the entrenched stability of tax-code provisions -- such as the mortgage interest tax deductions -- that provide subsidies with no need for annual Congressional appropriations votes. Still, low-income public housing has been routinely attacked by Republicans and Democrats alike as the quintessential example of a discredited, obsolete philosophy of big-government welfare. Since the early 1990s, American housing policy has been driven by a durable bipartisan consensus on the need to “revitalize” the projects by destroying them, in favor of market-oriented mechanisms emphasizing deconcentration, dispersal, and mixed-income housing choice. The new policy keywords of this deconcentration doctrine signal that geography is at the heart of American ambivalence about providing government help for the housing needs of poor people. Yet these images and keywords are based on stereotypes and caricatures, suggesting that it may be worth revisiting a simple, seemingly self-evident question: what are the geographies of public housing communities in U.S. cities?

In this paper, we answer this question for New York City, using a combination of standard social-science hypothesis testing and local, narrative thick description. We begin with a brief historical review of U.S. housing policy, a discussion of the New York context, and a description of our data sources; then we undertake three empirical analyses. First, we use exploratory local indicators of spatial association to test the twin hypotheses of deconcentration policy: a) traditional public housing is strongly associated with poverty concentration, and b) voucher-based housing assistance offers greater access to low-poverty communities. Second, we use spatial regression models to test these hypotheses while controlling for racial segregation and spatial autocorrelation. Results do not support the claims of deconcentration policy. The deconcentration doctrine is misleading in the case of New York City, because it ignores the contingencies of fine-grained, localized communities of wealth, poverty, and public assistance. Understanding the significance of these local contingencies requires thick description, and so in the third part of our study we revive the classical spatial-analysis techniques of the urban studies literature of the 1960s, mixed together with neighborhood narratives drawn from the local press. We map the landscapes of housing assistance across the City's intricate mosaic of neighborhoods, paying attention not only to the location of traditional public housing and voucher recipients, but also wealthy families assisted by the subsidies of the mortgage interest tax deduction. Understanding the context and contingency of these communities is crucial, we suggest, in efforts to build alliances and public support for the social protection of the right to housing and affordable shelter.

## **Historical Spatialities of Assisted Housing**

Nearly all histories of the U.S. federal government's role in low-income housing assistance describe a troubled policy evolution from the 1930s to the 1980s (Bauman, 1987, 1998; Hirsch, 1998; Wilson, 1987). Conceived first as a temporary response to the crisis of the Great Depression in the U.S. Housing Act of 1937, the federal commitment to low-income housing became a permanent (but small) part of the social welfare system after the Second World War. Title I of the National Housing Act of 1949 financed slum clearance and what later became known as urban renewal; Title II expanded financing for Federal Housing Administration (FHA) mortgage insurance; and Title III authorized the construction of 810,000 new public housing units by 1955 (Long and Sohmer, 1999). America's welfare state remained small compared to those in Western Europe, however, and low-income housing was particularly marginalized. The goal of Title III of the 1949 Act was met twenty years late -- in contrast to the swift action on FHA insurance (which fueled suburbanization) and slum clearance and redevelopment (which destroyed a great deal of low-cost inner-city housing). Public housing was "attacked from the start," (Lang and Sohmer, 2000, p. 297) and key provisions of federal programs created spatial biases that usually confined public housing to high-poverty areas. Suburban jurisdictions could avoid public housing by doing nothing (not creating a local public housing authority to seek federal funds), while big cities with urgent housing needs (and severe poverty) aggressively pursued federal money for slum clearance -- and, in many cases, to reinforce local patterns of segregation by race and class. The brief expansion of funds for public housing during the Johnson Administration, funneled through the newly-established U.S.

Department of Housing and Urban Development (HUD), financed the construction of many high-rise apartment blocks, many of them confined to low-income, African-American neighborhoods. The Nixon Administration imposed a moratorium on subsidized production programs in 1973, and ever since, low-income housing assistance has involved a reduced federal role in favor of state- and locally-led partnerships, and a blend of block grants, tax credits to private developers, and vouchers. Vouchers, authorized by “Section 8” of a law that took effect in 1975, have been regarded as inherently superior to public housing in allowing poor families to live in moderate- or middle-income neighborhoods. For almost a decade, Section 8 included two parallel programs: a) a tenant-based system where households receive vouchers and must find landlords willing to accept them, and b) “project-based” Section 8, where private developers received subsidies to build and operate rental units, subject to agreements for specified contract periods requiring owners to accept households with vouchers. New additions to the project-based Section 8 program were eliminated in 1983, and in 1998 Section 8 was renamed the Housing Choice Voucher (HCV) program.

Nevertheless, the short, mid-1960s legacy of public housing construction has shaped public perceptions and policy choices up to the present day. Public housing constitutes a small share of the low-income rental housing stock, most low-income housing involves no federal assistance, and only a small portion of public housing is in the troubled high-rise towers wracked by violent crime and intergenerational poverty. And yet these “projects” dominate popular discussion and policy debate, because public housing became associated with the “tangle of pathologies” documented in the

“underclass” research of the 1970s and 1980s (Wilson, 1985, 1987, 1997; Case and Katz, 1991, Schill and Wachter, 1995). As Dolbeare (1983, pp. 55-56), put it a quarter-century ago:

“In housing, unlike any other program, mistakes are permanent and visible, and successes disappear. ... fewer than 10 percent of the units in the public housing program are in the monster high-rise projects that so many think of as public housing. ... the successful ones are not known as public housing because they look like everyone else’s housing. They are not ‘projects.’ The successes are invisible, so it is often hard to persuade people that there really are so many. The failures, unfortunately, are all too visible.”

By the end of the 1980s, a growing consensus began to emerge: a) the spatial concentration of poverty exacerbates the problems of impoverished communities and society as a whole, b) federal assistance policies, especially public housing, contributed to the spatial concentration of poverty as well as racial segregation, and c) public policy should be reformed to help poor families on housing assistance to live in residential environments that are more integrated by income and race (Crump, 2002; Imbroscio, 2008). In 1989, Congress created the National Commission on Severely Distressed Public Housing (NCSDPH) to identify the nation’s worst developments and to “develop a national action plan to eliminate distressed conditions nationwide” (Epp, 1998, p. 123). The Commission’s final report, delivered three years later, identified historical and demographic factors as well as tenant admissions criteria that had concentrated the



“poorest of the poor” in some of the worst projects. Meanwhile, there was encouraging evidence in favor of “dispersal” strategies. The Gautreaux demonstration program, created in response to a 1976 U.S. Supreme Court decision on a civil rights lawsuit and institutionalized in a 1981 consent decree, used vouchers to help residents of Chicago’s troubled inner-city projects move to better environments -- typically, to apartments in predominantly white, middle-income suburbs. Longitudinal research documented significant improvements in educational outcomes of the children of recipients (Rosenbaum, 1991), but the lack of advances in employment or earnings -- and the very small number of families helped -- led one of HUD’s senior analysts to conclude that “the Gautreaux program produced a cottage industry for researchers but modest results for public housing tenants”; if the program were to be replicated elsewhere, “the results will be so microscopic that it will take sophisticated and talented social scientists to uncover them” (Welfield, 1998, p. 233). Replication *did* happen, and it emphasized poverty deconcentration, income mixing, and a bias against renting in favor of homeownership. The Gautreaux program served as the template for many local housing authorities sued for discrimination (Welfield, 1998). In 1990, Congress began creating a series of programs under the title, “Homeownership and Opportunity for People Everywhere” (HOPE). Responding to the report of the NCSDPH, Congress created a demonstration program in the fall of 1992 that became HOPE VI, designed to “revitalize” troubled project developments. The next year Congress expanded the Gautreaux experiment to a five-city Moving to Opportunity (MTO) demonstration program. Through both Clinton administrations, federal policy continued to shift away from federally-owned public

housing towards a blend of vouchers, mixed-income public-private partnerships, and market-oriented subsidies to developers like the Low-Income Housing Tax Credit (LIHTC) (Varady et al., 1998; Goetz, 2003). Most of these priorities continued through both terms of George W. Bush's administration.

The evidence on the success of deconcentration, and the superiority of demand-side, voucher assistance over traditional public housing, has always been somewhat mixed (Dolbeare, 1983; Goetz, 2003; Rosenbaum, 1991; Varady et al., 1998; Welfield, 1998). Nevertheless, since the late 1980s, a bipartisan political consensus has elevated deconcentration from a policy option to a full-fledged doctrine that is, in some cases, imposed rather than chosen. As Ed Goetz (2003, p. 10) suggests,

“The debate over addressing poverty in place as opposed to facilitating residents' exit from poor neighborhoods is not new. Nor has the question been resolved in any final sense. Forced deconcentration, however, is an emphatic statement. It takes a strong position on one side of the question. Deconcentration says that households should leave their central-city neighborhoods for their own good -- that they would be better-off in neighborhoods shared with more affluent families.”

### *Reconsidering the Geographies of Assisted Housing*

There is one fairly consistent finding from twenty-five years of research on the various demonstration programs and policy changes of deconcentration: individuals and families who move out of the most deteriorated public housing projects in the most

severely poor, racially-segregated inner-city neighborhoods, into middle-income, racially integrated suburban communities are more satisfied with their homes and neighborhoods, and their children usually benefit from the shift to improved local schools (Basolo and Nguyen, 2006; Popkin et al., 1993; Rosenbaum, 1991; Rosenbaum et al., 2005; Varady and Walker, 1998). The multiple qualifiers and contextual adjectives of this summary conclusion, however, matter a great deal.

There are four compelling reasons to reconsider the community assumptions of the deconcentration doctrine. First, demonstration programs conducted for the *worst*, most dilapidated public housing projects in the *worst* neighborhoods cannot be generalized to all public housing. “If one takes the word of the National Commission on Severely Distressed Public Housing” -- the inspiration for HOPE VI and mobility programs -- “then 94 percent of all public housing developments are providing decent shelter for their residents.” (Stockyard, 1998, p. 245). Second, very few of the people who experience deconcentration gain access to the most desirable, middle-income suburban neighborhoods envisioned by demonstration programs. In the HCV program, for instance, landlords participate only if the mix of benefits and drawbacks (stability of occupancy and rental income, vs. rules and paperwork) is better than the private rental market in the neighborhood; there has always been concern that the shift to vouchers will simply reconcentrate assisted households into a new set of bad neighborhoods (Popkin et al., 2000; Wang and Varady, 2005). Third, the vast majority of research on the neighborhood conditions of assisted households relies on a-spatial tabulations of census tract characteristics, with no attempt to map or measure genuine neighborhood effects.

This methodological bias obscures the many cases where inner-city public housing projects built prior to the 1973 moratorium are now surrounded by gentrification and wealthy homeowners. The close juxtaposition of poor public housing residents and wealthy gentrifiers contradicts the rationale for deconcentration and dispersal (Crump, 2002), exacerbates tenant mistrust and suspicion that HOPE VI is a gentrification program (Fosburg et al., 1996), and raises questions about the meaning of housing “assistance”: nationally, the favorable tax treatment of homeownership, which is biased towards high-income owners with the largest mortgages -- totals \$19.6 billion for property tax deductions, \$22.9 billion for capital gains exclusions on primary residences, and \$72.6 billion for the mortgage interest tax deduction (Woo and Buchholz, 2006, p. 5). These kinds of contrasts and inequalities are vivid and inescapable when the fine-grained community patterns of assisted housing are mapped, described, and interpreted (Goetz, 2003; Varady and Walker, 1998; Wang and Varady, 2005). Finally, the deconcentration doctrine usually ignores the local contingencies of urban policy. Federal programs interact with state and local policies, and the effects of federal provisions can be shaped in important ways by decisions at these “lower” scales. The interactions can draw intricate patterns in the policy and market landscapes of a city. Unfortunately, there have been few attempts to undertake thick descriptions of the character of places shaped by the mix of local and federal policy frameworks (notable exceptions include Goetz, 2003; Vale, 1998). What if we tried to map and interpret the policy landscapes of subsidized housing -- for rich and poor people -- across an entire city?

This paper is a spatial analysis of assisted housing in New York City neighborhoods. After a brief review of the distinctive housing policy circumstances of the city and a presentation of our data sources, our empirical analysis addresses three distinct yet related issues. First, we provide an explicit spatial analysis to test whether the key assumption of the deconcentration doctrine holds in the case of New York City. Deconcentration presumes that supply-side assisted housing (conventional public housing) confines recipients to neighborhoods of concentrated poverty, while demand-side assistance (especially rental vouchers) allows households to gain access to decentralized, less-poor neighborhoods. We use Anselin's (1995, 2006) local indicators of spatial association (LISA) approach to correlate the spatial distribution of assisted housing with poverty conditions in surrounding neighborhoods. Second, we use several different spatial regression models (Anselin and Bera, 1998; Brunson et al., 1998) to measure the influence of racial segregation and spatial autocorrelation on the poverty-housing assistance link. Third, we use the classical urban tradition of factorial ecology and neighborhood classification (Berry and Kasarda, 1977) to place low-income assisted housing within the context of the entire urban fabric. Federal housing assistance interacts with state and local policy infrastructures in contingent and contextual ways, producing an intricate topography of wealth, poverty, and subsidies across different kinds of neighborhoods. We provide brief vignettes of recent struggles over housing affordability and assisted housing in selected sites across the City, as a way of highlighting the mismatch between the diverse poor and working-class experiences of urban housing and the crude policy categories and stereotypes of housing subsidies.

## ***Contextus New York***

It is widely recognized that single-city case studies reflect the distinctive circumstances of particular urban and regional settings. Understanding the urban context of federal housing policy, however, requires more than a simple caveat: *contextus*, from the Latin *contexere*, “to weave,” signals that the local urban scale is much more than a filter for policies established from “above.” Key portions of the federal social safety net were woven through struggles in New York, between the City’s powerful real estate growth machine and its dense network of community, labor, and tenant organizations. The City began building what was essentially public housing in 1934, three years before the federal Housing Act of 1937 (Marcuse, 1995). New York State’s middle-income Mitchell-Lama housing subsidy program, introduced in 1955, served as a model for federal programs launched in the 1960s and 1970s (DeFilippis and Wyly, 2008). The City’s growth coalition has, with few exceptions, supported aggressive use of federal resources to deal with the chronic shortage of affordable housing, sheltering many low- and moderate-income renters from the worst excesses of what has been (at least until the current crisis) an extremely tight market. Despite revisions that weakened state-level rent control laws in the late 1990s, most of the City’s rental housing is still subject to various limitations on permissible rent increases (Table 1). Some units are governed by affordability restrictions thanks to state construction subsidies (e.g., Mitchell-Lama), while others are partly shielded from the market thanks to various federal programs.

TABLE 1 ABOUT HERE

New York's exceptionalism has not protected it from the broader transformation of the welfare state, but the process has been more contested, with occasional, partial reversals. As in so many other cities, the emphasis on creating new affordable units from the 1930s through the 1960s shifted towards vouchers and other demand-side interventions after the 1980s -- yet the City still has more households living in traditional public housing than receiving Housing Choice Vouchers (Table 1). In 2003, the City embarked on a ten-year, \$7.5-billion effort to create or preserve housing affordable for 500,000 low- and moderate-income households -- a plan that celebrated the halfway-point, 82,500-unit milestone in September, 2008, before the global (and local) financial crisis stifled financing (Fernandez, 2009). In contrast to cities where HOPE VI and other initiatives quickly swept away vast sections of public housing, redevelopment has been much more protracted in New York. Developments are being withdrawn from subsidy programs, but in many cases the housing units are then covered by rent stabilization limits. De-regulation of the stabilized units proceeds slowly, as units become vacant and landlords make renovations that allow increased rents on the way to the threshold of \$2,000 per month, where the rent control laws allow for "luxury decontrol."

Slowly but surely, however, affordable units are being lost, and many landlords pulled out of subsidy programs during the long housing boom (DeFilippis and Wyly, 2008). The tight market made life difficult for many thousands of low-income renters, sustaining long waiting lists for both public housing and vouchers; the official HCV waiting list (127,000 in 2007) represents perhaps one-sixth of the estimated 800,000 households with incomes low enough to qualify for assistance (Scott, 2007). Luxury

decontrol, meanwhile, erodes the affordable housing stock in gentrifying submarkets even as the City's ten-year plan attempts to build or preserve affordable units elsewhere, creating a hamster-wheel policy dynamic. Between 2002 and 2005, the supply of units renting for less than \$1,000 per month fell by 155,000 (Lander, 2006). The proportion of renters paying more than half of their income for rent shot up by more than three percentage points, to 28.8 percent (Table 1).

## **Data**

We constructed a database of housing and demographic information for all census tracts in New York City. We obtained a variety of measures for income and poverty, housing characteristics, and racial-ethnic composition from the 2000 Census of Population and Housing. Freedom of Information Act requests were filed with HUD to obtain information on HCV recipients and project-based assisted housing units as of the summer of 2003. HUD's LIHTC database was used to locate tax-credit affordable units. Information on traditional public housing was obtained from the New York City Housing Authority. Finally, we obtained estimates of the average mortgage interest tax deduction per homeowner in 2003 from a study of IRS data (compiled to the Congressional district scale) by Robert Dietz (2006). We excluded all census tracts with populations below 25 as recorded in the 2000 Census.

Our core data snapshot captures a distinctive period in recent housing market history. By the middle of 2003, New York City was recovering from the short 2001 recession, and the City's perpetual shortage of affordable units was beginning to worsen.



Yet this was before the massive wave of mortgage lending and speculative investment associated with the unprecedented national credit binge of 2004-2006. In the latter sections of the paper, we complement our empirical analysis (based on indicators measured in 2003) with neighborhood descriptions and interpretations from local press sources documenting more recent trends.

### **A First Glance at Deconcentration**

The deconcentration doctrine holds that conventional public housing is concentrated in, and surrounded by, high-poverty neighborhoods. To test this proposition, we use bivariate local indicators of spatial association: for each census tract, we calculate the standardized value of public housing as a share of total tract housing stock; we then correlate this z-score with the standardized rate of extreme poverty for nearby census tracts. Extreme poverty is measured as the proportion of the population living in households with incomes below 50 percent of the poverty threshold. To operationalize the concept of “nearby” census tracts, we created a spatial weights matrix that averages the values for the six nearest neighbors for each tract (see Anselin, 1995, 2004; Anselin et al., 2006). These local correlations, equivalent to local Moran’s I statistics, are tested for statistical significance by comparing the values to those obtained under conditions of spatial randomness based on multiple permutations for all tracts across the city (see Anselin, 2006, pp. 14-15). Cluster maps portray areas of spatial correlation that exceed what would be expected under conditions of random spatial

distribution, at a probability level of 0.05. (For a complementary, univariate approach examining assisted housing across several different cities, see Oakley, 2008).

#### FIGURE 1 ABOUT HERE

Consider first the spatial correlation between conventional public housing and nearby high-poverty rates (Figure 1a). In tracts shaded red, high concentrations of public housing are correlated with high rates of severe poverty in surrounding tracts, while areas shaded solid blue indicate little public housing and low rates of extreme poverty nearby. Deconcentration policy, based as it is on the underclass and social isolation theories developed in the 1970s and 1980s, assumes that most neighborhoods will fall into one of these two categories. Many do. Many public housing concentrations do have correlations with surrounding poverty that go beyond what would be expected under conditions of spatial randomness: solid red tracts appear throughout Harlem, across the South Bronx, and from the Lower East Side into Bedford Stuyvesant and Bushwick. Yet if most public housing concentrations are surrounded by comparatively high rates of severe poverty, this does not mean that poor neighborhoods always have a lot of public housing. Note that scores of neighborhoods are shaded light blue, indicating that low shares of public housing are correlated with high rates of poverty nearby, from Harlem to Washington Heights, across many parts of the South Bronx, and through a wide band of neighborhoods from Sunset Park to Flatbush to Crown Heights and East New York. Sixteen census tracts (in pink) indicate higher-than average concentrations of public housing surrounded by lower-than-average rates of extreme poverty.

The link between assistance and neighborhood poverty is more moderate for project-based Section 8 (Figure 1b). Concentrations of project-based units are surrounded by high rates of extreme poverty in much of Harlem and the South Bronx (solid red), but other parts of these neighborhoods have high poverty rates with little or no project-based assistance (light blue). And a few neighborhoods have significant concentrations of project-based units surrounded by lower than average rates of severe poverty.

In the main, these maps are consistent with the large body of historical research on assisted housing: public housing and project-based assistance is mostly confined to high-poverty areas, and is rarely available in low-poverty communities. Yet it is crucial to remember that many high-poverty areas have little or no public housing or project-based assistance. Stereotypical public housing landscapes constitute a small portion of the diverse array of communities with high rates of poverty.

The second fundamental thesis of deconcentration, though, is that vouchers offer better access to low-poverty environments. If vouchers perform better than traditional public housing and project-based units, then, we should see fewer statistically significant spatial correlations with extreme poverty rates. The evidence does not support this interpretation (Figure 1c). Most of the Bronx has higher-than-average concentrations of HCV recipients, living in neighborhoods surrounded by higher-than-average rates of extreme poverty (solid red tracts); smaller clusters also appear from the southern fringe of Williamsburg, Brooklyn all the way to East New York. Other parts of the City -- Staten Island, much of Lower Manhattan, most of Queens -- have few voucher recipients and

low rates of poverty. Most neighborhoods are shaded white, indicating no statistically significant departure from a spatially random configuration -- hence, vouchers do seem to have succeeded in breaking the link between housing assistance and neighborhood poverty. The distribution of vouchers, and their spatial association with severe poverty, closely mirrors that of LIHTC housing units (Figure 2) (see also Oakley 2008). Yet the bivariate LISA approach identifies spatial *clustering*, and does not measure absolute *concentration*. If we tabulate the proportion of assisted households living in different cluster types, the case for vouchers becomes even more questionable (Table 2). It is encouraging that an outright majority of HCV households (52.9%) live in tracts where there is no spatial correlation with nearby extreme poverty. But this figure is even higher for other types of assisted housing -- including traditional public housing. More than 40% of voucher recipients live in neighborhoods where there is a significant spatial clustering of severe poverty -- compared to less than 30% for public housing residents.

FIGURE 2 ABOUT HERE

TABLE 2 ABOUT HERE

### **Modeling the Spatiality of Assisted Housing**

Descriptive, exploratory measures of spatial association are useful but quite limited. A more rigorous analysis requires an approach that can simultaneously a) disentangle the relative effects of different types of housing assistance, b) control for crucial mediating factors -- especially racial-ethnic segregation, and c) control for different kinds of spatial autocorrelation and spatially varying relationships. We use three different kinds of spatial regression to accomplish these goals. A *spatial lag* model

helps to measure the housing-poverty link while “filtering” out the confounding effects of the spatial reality that poverty in one place is at least partially caused by the poverty of surrounding neighborhoods. A *spatial error* model measures the housing-poverty link while adjusting for the spatial autocorrelation of errors, residuals, and unmeasured omitted variables (Anselin and Bera, 1998). And a *geographically weighted regression* helps to determine whether there is significant local variation in the underlying structure of a model relating poverty to different housing types (Brunsdon et al., 1998). For this stage of our analysis, we focused on overall neighborhood poverty rates rather than the narrower definition of extreme poverty.

#### TABLE 3 ABOUT HERE

These three complementary approaches illuminate the role of neighborhood contingency in the link between housing assistance and poverty (Table 3). After controlling for neighborhood racial composition, vouchers have a stronger connection to tract poverty than traditional public housing -- whether measured in terms of the standardized slope coefficient or the semi-partial correlation (Table 3, OLS model). But spatial dependence is crucial: robust Lagrange multiplier tests are highly significant ( $P < 0.001$ ) for both spatial lag and spatial error models (with a substantially greater value for the former). Part of what accounts for neighborhood poverty is the poverty of surrounding areas, thus obscuring the independent effect of housing assistance; this spatial effect seems more important for vouchers (where the coefficient drops by 60% between the OLS and spatial lag models) than for public housing (28%). The spatial error model is based on a somewhat different conceptual logic (see Anselin and Bera,

1998), and reverses these relative effects (a 79% reduction of the public housing coefficient, versus 56% for vouchers). Yet both models confirm that even after controlling for racial composition and spatial autocorrelation, vouchers have a stronger link to local poverty rates than all the other types of federal low-income housing assistance.

Project-based Section 8, LIHTC, and traditional public housing all exhibit small but significant positive association with neighborhood poverty, after controlling for racial and ethnic segregation. But these effects are constant across different neighborhoods, with no systematic local variation. For vouchers, by contrast, the link with poverty is generally stronger, but it varies widely across the city (Table 3, Monte Carlo results; a map of the coefficient estimates is available on request from the authors). Vouchers have only a small independent effect on local poverty rates in the vast poor and working-class Black and Latino sections of Harlem and the Bronx. But in Eastern Brooklyn and several sections of Queens and the Far Rockaways, the link is much stronger and geographically pronounced -- vouchers in these areas do not account for a large share of the housing stock, but their location is very closely tied to higher local poverty rates. Poor households, it seems, are only able to get access to some of these outlying parts of the city through the HCV program; the corollary, though, is that vouchers play a significant role in poverty re-concentration in these communities.

## Mapping the Context and Significance of Assisted Housing

Our analysis thus far has focused narrowly on the link between federal low-income housing assistance and neighborhood poverty. But conventional public housing constitutes fewer than one in twelve rental homes in New York City, and Section 8 assistance helps fewer than one in sixteen renter households. By contrast, more than 362 thousand homeowners -- more than a third of all homeowners in the City -- itemized mortgage interest payments on their 2003 tax returns, taking deductions worth a total of more than \$4.83 billion; real estate tax deductions accounted for a further \$1.63 billion subsidy to homeowners (calculated from Dietz, 2006, p. 14). Financial flows of this magnitude should encourage us to rethink taken-for-granted definitions of public housing, and to look at the many different kinds of housing subsidies -- for poor, rich, and middle-class -- that help to shape the character of neighborhoods in New York City and all other U.S. cities.

In the third main phase of our study, then, we set out to develop a new kind of map of assisted housing. What makes the map new is not the method used to create it (which grows out of the heyday of a now-classical approach developed by, *inter alia*, Berry, 1972; Berry and Horton, 1970; Berry and Kasarda, 1977; Goddard, 1970; Murdie, 1969; Perle, 1981) but the decision to place a map at the center of an analytical narrative on this particular issue. The classical methods are rarely used today by critical analysts of housing policy. The eloquent book *A Right to Housing: Foundation for a New Social Agenda* (Bratt et al., 2006) includes not a single map to update the powerful cartographies of social inequalities that were central to critical urban research in the 1960s and 1970s

(see Ley, 1983, pp. 77ff). For this phase of our study, then, we analyze a broader range of housing and social conditions for all of New York City's census tracts. Our general approach involves a) using standard multivariate taxonomy procedures to develop categories based on distinctive combinations of assisted housing and social conditions of class, racial-ethnic inequality, and local public institutions, and b) narrating several case studies of the kinds of controversies over assisted housing and affordability that are underway in different parts of the City's neighborhood fabric. The general theme of our analysis is that even in New York City, with its best-case scenario of a long history of rent regulation and aggressive local use of federal resources for affordable housing, the struggle for affordable housing is a particularly contentious process that is intensely local, shaped by fine-grained neighborhood variations of property-market activity, wealth, and poverty. This intricate mosaic demands careful study. It defies the casual public stereotypes of public housing, as well as the simplistic binaries and benchmarks woven into housing policy.

### *A New Ecology of Assisted Housing*

What does the geography of assisted housing look like if we broaden the scope beyond conventional housing and vouchers? Although it is not possible to measure every kind of subsidy at the tract level, we were able to capture quite a few -- active project-based Section 8 units, project-based units terminated from the program by landlords or HUD, and low-income housing tax credit developments. We also measured homeownership, rent and income levels, mortgage capitalization, and average mortgage



interest tax deduction for itemizing homeowners (unfortunately, this latter variable is only available at the Congressional district scale). Our database also includes a conventional array of demographic background variables from the 2000 Census, including income, poverty, racial/ethnic composition, and the oft-neglected variables for the share of each tract's population living in one of five different types of group quarters: correctional institutions, nursing homes or hospitals, college dormitories, group homes, and other group quarters.

One of the dominant approaches in urban ecology involves performing a principal components or factor analysis on an entire dataset of carefully-chosen variables, followed by a cluster analysis using the factors as axes in the Euclidian space of cluster taxonomy. To ease the interpretation, we modified the classical approach, dividing our measures into two groups -- a) general demographic reference or background variables, and b) specific housing assistance variables we wish to highlight in the final cluster analysis. First, we perform a principal components analysis only on the reference variables -- twenty-three different measures distilled down to seven orthogonal, unrotated components that account for 71 percent of the original variance. We experimented with multiple combinations of variables to produce a factor solution that balances theoretical relevance with empirical validity, judged by eigenvalues and communality estimates.

Our next step is to use the tract scores on the seven components as input to a cluster analysis. At this point we add the second group of variables -- seven untransformed shares for conventional public housing, active, owner- and HUD-terminated project-based units, HCV households, recent entrants to the HCV program, and low-

income housing tax-credit units. This approach helps to balance the statistical purity of orthogonal axes measuring many interrelated things (the seven orthogonal components) with the need to interpret how well a given classification captures variation in specific measures (the seven housing assistance variables). We used an iterative nearest-centroid sorting algorithm to produce a cluster solution of 33 neighborhood types, summarizing 63 percent of the overall variance in all the measures included in the model. The final cluster solution performs well in distinguishing all of the demographic and background variables: the seven principal components post values on the  $R^2 / (1 - R^2)$  measure that are encouragingly high (from 2.6 to 16.6). For the seven housing assistance measures, the cluster solution is highly accurate for HCV households (an  $R^2$  ratio of 25.4) but extremely low for the three measures of project-based Section 8 (all less than 1.0).

FIGURE 3 ABOUT HERE

### **Mapping and Meaning**

The end result of all these statistical procedures is a simple map of neighborhood types for the entire City (Figure 3). This map is not an answer but rather a series of questions; it is the beginning of the conversation, not the end. What do all of these patchworks of color mean? What kinds of struggles over affordable and assisted housing are, quite literally, taking place in the different neighborhood types shown on the map? Our interpretation emphasizes three notable features of this map: the proliferation of many different communities within the broad stereotype of the “inner city,” the importance of enclaves of middle- and upper-class public housing, and the intensified struggles over affordability in very different kinds of neighborhood settings.

### *Inner Cities*

The first notable feature of the map is that there is no single “inner city” that can be stigmatized by an association with “the projects.” As David Ley (2000, p. 274) has emphasized, “all classifications are useful rather than true, and this statement applies with particular force to the classification of geographical regions.” In this sense, it is quite useful to distinguish the five types of neighborhoods most closely associated with the notion of “inner city” and low-income housing assistance, portrayed in Figure 3 as a color progression from yellow to orange, red, and black. More than 363 thousand people live in mixed Black and Latino neighborhoods with extensive low-income assisted housing (shaded black). The average tract in this group has 38 percent public housing, 6.6 percent active project-based Section 8, and 4.4 percent HCV households, all in the context of an overall poverty rate of 45 percent and a severe poverty rate of 26 percent. In general, then, this category conforms closely to the popular and policy stereotypes of poverty-ridden public housing landscapes; the same applies to the tract encompassing Coney Island, which is distinguished by a 39 percent poverty rate and a complete dominance of public housing (see also Brown and Wyly, 2000). But other clusters highlight different neighborhood settings, with no significant linkage between poverty and public housing. About 294 thousand people live in Black working-class neighborhoods that have less than the citywide tract average of public housing (shaded red). These communities -- primarily Bedford-Stuyvesant, Crown Heights, and East New York -- have about twice the citywide share of project-based Section 8, HCV, and LIHTC units, with an overall poverty rate of 29 percent and a severe poverty rate of 17 percent.

About 134 thousand people live in moderately poor Black neighborhoods with some public housing or project-based Section 8, where severe poverty is not far off from the citywide average (14.0 percent vs. 11.0 percent). Conventional public housing comprises an average of 14.0 percent of all housing units in these neighborhoods (shaded orange), which are scattered throughout Crown Heights, Bed-Stuy, and the Rockaways (south of JFK Airport). The neighborhoods where vouchers play the most significant role are poor and working-class Latino communities (shaded dark brown) that are home to more than 1.2 million people across 241 tracts in the Bronx and large parts of Central Brooklyn. Poverty rates approach 40 percent in these areas, and severe poverty rates are about 23 percent -- not much different than the stereotypical high-poverty public housing neighborhoods (shaded black). The average tract share of HCV households is 9.5 percent (three times the citywide figure), and public housing shares average 14.3 percent.

There is little evidence here to support the notion that a shift to vouchers will deliver a clean break from the spatial concentration of poverty. Vouchers, project-based Section 8, tax-credit units, and traditional public housing all provide extremely limited yet crucial responses to the chronic shortage of affordable housing for poor and working-class people, and these subsidies interact in contingent ways with localized community geographies.

### *White Privilege and Welfare*

The second narrative of this cartography highlights crucial spatial and racial dimensions of Dreier's (2006) analysis of the inequities of U.S. housing policy, which he

titles, “Federal Housing Subsidies: Who Benefits and Why?” Implicit in Dreier’s analysis is the logical next question: Who benefits and *where*?

More than 1.8 million New Yorkers live in middle-income white homeownership communities (shaded light green) across Bayside, Flushing, Howard Beach, Glendale and Forest Hills (in Queens), Southern Brooklyn, and Staten Island. In these areas, slightly more than half of all households have gained access to homeownership and its package of subsidies. Yet these subsidies increase at higher incomes, so the welfare payments to middle-class areas are quite modest compared with those provided to owners in wealthy and elite White neighborhoods in Manhattan (dark green) -- where average household incomes topped \$225,000 even before the multiple Bush tax cuts between 2001 and 2003. The average homeowner in these white wealth and white elite clusters receives annual housing assistance to the tune of \$19,000 through the mortgage interest tax deduction, and much more in the form of imputed rent and tax-free capital gains windfalls at sale. These neighborhoods have about 84 thousand residents, no project-based Section 8 units, 573 tax-credit units, and fifty fortunate HCV recipients; these neighborhoods have precisely zero public housing units, unless of course we define public housing properly to include wealthy tax-subsidized owners.

The geography of these subsidies suggests that however unlikely the prospects for reform of the mortgage interest deduction, New York City could play a crucial role in the necessary confrontations and compromises. Dreier (2006), along with Green and Reschovsky (2001) and others, have analyzed the political geography of the subsidy: the losers from any reform of the mortgage interest tax deduction are concentrated in a fairly

small number of Congressional districts, but they stand to lose big; the winners -- low- and moderate-income households -- will each win a very small amount, but they are dispersed across many different kinds of Congressional districts. These considerations are important in efforts to build coalitions for changes in federal policy, but it is clear that New York City will be one of the nation's best testing grounds. Here we find a large concentration of wealthy homeowners on welfare -- many living in the dark green tracts in Manhattan shown on Figure 3 -- and many other lower-income neighborhoods represented by Congressional delegates who really do understand that HUD's budget is only a small fraction of the tax-based assistance provided to wealthy homeowners. The five Congressional districts with the nation's lowest aggregate subsidy from the mortgage interest deduction are all in New York City (Dietz, 2006). But gentrification in New York has also muddied this picture a bit, and although renter-dominated urban districts tend to have fewer homeowners taking the mortgage interest deduction, those who get it are receiving quite large subsidies. New York's fifth district -- Charlie Rangel's stretch of Harlem and the South Bronx -- has only 52,064 taxpayers who itemized the mortgage deduction; but on average, each of these taxpayers claimed the second-highest deduction in the State of New York -- more than \$21,000 in 2003 (Dietz, 2006, p. 14).

### *Communities, Clusters, and Collisions*

Harvey Molotch (1976, p. 311) famously reminded us that "We need to see each geographical map ... as a mosaic of competing land interests capable of strategic coalition and action." Molotch wrote these words when "the social welfare city" that had been

created and nurtured by “cosmopolitan liberalism” (Gifford, 1978, pp. 581-582) was caught in a terrible crisis. Responses to this crisis over the past generation -- at local, national, and transnational scales (Harvey, 2005) -- underscore the importance of studying interest-group mosaics of landlords, tenants, developers, and elected officials struggling over the rules of use value and exchange value in housing. Our third interpretation of the map thus emphasizes the juxtaposition of starkly different communities and the effects on struggles over affordable housing. Put simply, the patches of color describing the extremes of wealth and poverty measured in cluster analysis provide a refined update of landmark studies like Mollenkopf and Castells’ (1991) *Dual City*, which portrayed urban inequality primarily as a dichotomy between Manhattan and the Outer Boroughs. The metropolis has always been much more complicated. In recent years, however, as a general rule the sections of the map where red meets green (Figure 3) are those areas where one is likely to find the most urgent public discussions of gentrification, redevelopment, and affordable housing -- for instance, Harlem, the Lower East Side, and Williamsburg. Even so, the affordability drama plays out in areas far beyond these well-known zones.

Consider just a few vignettes drawn from an unlimited array of recent neighborhood collisions. The census tract surrounding the intersection of Atlantic Avenue and Boerum Place exhibits a curious statistical profile in our database, with 2000 Census figures portraying a mixture of middle-class residents, college students, and residents of correctional institutions. But the City’s Department of Corrections closed down the Brooklyn House of Detention in June, 2003, just as a wave of upper-middle

class condos began to come on the market a few blocks away. By early 2007, the City's latest Corrections restructuring proposal, with its plans to reopen the House of Detention, unleashed a furor of public debate. The discourse seemed to have been read out from a textbook on locational conflict, with the entire scenario accelerated by the rapidity of condo development in this part of Brooklyn. Small businesses in need of the patronage of corrections officers and prisoners' families are squaring off against the new condo buyers (Lee, 2007).

Several miles to the east, residents are in a much weaker position. Although the City's Housing Authority has generally avoided tearing down large parts of its public housing stock (unlike, say, Chicago) there have been exceptions. Prospect Plaza, in the Brownsville section of Brooklyn, was slated for revitalization after the Authority won a \$22 million HOPE VI grant in 1997. The Housing Authority had worked to persuade tenants to support the plan, but a few years later the pattern resembled the syndrome only too familiar to HOPE VI researchers elsewhere. Tenants found that resources flowed freely to fulfill promises for relocation assistance, but not for other commitments; and strict admissions rules, including the Housing Authority's strict interpretation of a 1998 federal law mandating internal deconcentration of public housing projects, and net reductions of subsidized units meant that almost none of the original tenants would be around to enjoy the fruits of revitalization. In 2001, the recently-resigned Tenant Association Vice President offered simple advice to other tenants asked to support renovation proposals under HOPE VI: "I'd tell them don't do it. Run -- that's what I'd tell them. Run as fast as you can." (Neuwirth, 2001, p. 8). Two years later, the



Authority broke ground on “the first newly constructed home-ownership units ever built for public housing in New York City” -- in a model development designed to “maintain a healthy socio-economic balance in New York’s neighborhoods.” (NYCHA, 2006, p. 9).

But maintaining a healthy socio-economic balance requires ongoing struggle, and fortunately New York’s patchwork of rent regulations give tenants a better chance here compared to many cities. Several examples illustrate the most recent challenges for the lower middle classes and the working poor. Note the intricate mixture of university neighborhoods, public institutions, and working-class neighborhoods in the Lower East Side. One of the tracts on the northern edge of the gentrification frontier is partitioned by our analysis into a cluster designated as a middle-income integrated community; just to the north is a tract classified as white upper middle class. These tracts have zero public housing units, zero project-based Section 8 units, and zero HCV households among more than 11 thousand housing units. Yet this is the quintessential public housing community, in this case conceived in the spirit of Keynesian middle-class welfare in the early years of cosmopolitan urban liberalism. Met Life built Stuyvesant Town and Peter Cooper Village in the late 1940s, with the prompting of Robert Moses and generous public subsidies for land acquired through eminent domain and long-term property tax concessions. But rent stabilization requirements have kept most of the units affordable ever since, in what the historian Samuel Zipp called an “urban Levittown” (quoted in Bagli and Scott, 2006, p. A19). Building this particular Levittown required considerable displacement -- some 11 thousand people were forced to move from an 18-block area (Lander, 2006, p. 9) -- but up until the mid-1990s, all of the units remained protected by

the City's rent stabilization rules. Unfortunately, after significant revisions to those rules in 1994 and 1997, Stuyvesant Town and Peter Cooper Village went through the long slow bleed of units de-regulated to market-rate status that has been underway in so many parts of the City. By the summer of 2006, Met Life decided to cash in on the long real estate boom by putting the entire property on the auction block, and guidance materials for prospective bidders laid out scenarios projecting how vacancies, renovations, and other changes would steadily reduce the proportion of stabilized units in the complex over the next decade (thereby justifying higher bids). At the time, stabilization protected about two-thirds of the units, which rented for about half of what they might fetch on unregulated market terms; it was clear that any bidder willing to pay Met Life's asking price (about \$5 billion) "is going to be eager to create a money-making luxury enclave" (Bagli and Scott, 2006, p. A1). A tenant campaign to join the bidding -- led by a City Councilmember who was a longtime Peter Cooper resident -- survived the first round, but ultimately lost out to a \$5.4 billion bid by Tishman Speyer, owner of Rockefeller Center, the Chrysler Building, and other Manhattan trophies (Lander, 2006). The sale was the largest real estate deal in American history. Tishman Speyer promised that there would be no sudden changes in the affordability status or composition of the complex, which has a population of about 25 thousand. But there is a general consensus that Tishman Speyer, under pressure to maximize its debt-burdened investment, will work aggressively to use vacancy decontrol and other provisions to expand the share of units unprotected by rent stabilization (currently 27 percent).

As the struggle for affordability plays out over the next generation, however, it will carry yesterday's politics into the future in ways that subvert the easy divisions between past, present, and future. Recall that the 2005 Housing and Vacancy Survey estimates 58,944 housing units across the City categorized as "occupied Mitchell Lama" units in Table 1. Mitchell Lama was a loan program created by the New York State legislature in 1955 to help build affordable homes to stem middle-class flight out of New York City; eight percent of the City's remaining Mitchell-Lama stock left the program between 2002 and 2005, since developments are free to privatize twenty years after construction once they pay off their subsidized State loan. More than one-quarter of the Mitchell Lama units that remain are in a neighborhood that our statistical model classifies as a Black middle-class neighborhood with almost no assisted housing on our other measures (no conventional public housing, no vouchers, etc.). This is Co-Op City, rendered in Ian Frazier's (2006, p. 54) eloquent *New Yorker* profile as "the largest cooperative housing complex in America, possibly in the world," where the first families moving in late 1968 stepped into what could very well be called "Utopia, The Bronx." Co-Op City was created through a fascinating history of labor union organizing and public funding designed to keep the remaining middle class of the South Bronx from moving to the suburbs. This history should not inspire too much nostalgia, though: Co-Op City, right on the City's northern boundary, still helped depopulate the South Bronx of its middle class. Substandard construction and maintenance budget catastrophes eventually led to a protracted rent strike in 1975-1976, culminating in the departure of the labor union affiliation and a precarious negotiated peace between the state and the "co-

operators.” Even so, the affordability restrictions and a few other facets of the original mission survive today: “Like the Soviet high-rise projects, Co-Op City is a survival from a more collectivist age into today’s world of everyman-for-himself.” (Frazier, 2006, p. 59). But now the state loans are paid off, and the profit possibilities eyed by Tishman Speyer for Stuyvesant Town and Peter Cooper Village look a bit different when seen from the northern edge of the Bronx. Once almost exclusively a White, Jewish community, the complex long ago became quite racially diverse, and now there is a large contingent of grandparents: “We are the largest naturally occurring retirement community in the world,” the President of the Board of Directors tells Frazier (2006, p. 64). The fiery aging radical who led the rent strike and the showdown with the State of 1975-1976 clearly sees what privatization could mean for low-income grandparents who might wish to finance their grandchildren’s’ college educations: “With the people who are living here now,” he reflects after summarizing the prices fetched by recent Mitchell-Lama privatizations, “that would be the largest transfer of real estate wealth to people of color in U.S. history.” (Frazier, 2006, p. 65). And yet not all the residents are comfortable with the Co-Op’s 55-45 percent vote in 2005 to study the issue in preparation for a final decision by 2010; the husband of a couple from Jamaica summed it up nicely: “We would lose the senior citizen benefits, then rich people move in, poor move out, rents go up.” (Frazier, 2006, p. 65).

Households in co-ops have partial access to the rights of property and capital accumulation, and thus confront bittersweet choices. But the more limited rights of renters inspire greater militancy in response to the spreading crisis of affordability. Far

away from Co-Op City, Stuyvesant Town, and Peter Cooper Village, tensions in a development on Jamaica Bay signal the continued uncertainty and urgency of the politics of public housing. Starrett City is the largest federally subsidized housing development in the nation -- but this is not conventional public housing or housing choice vouchers, but project-based Section 8 with subsidies flowing from the federal government to a private landlord, augmented with subsidized Mitchell-Lama credit. At 3:00 in the morning on February 8, 2007, that landlord decided to sell the entire complex to a group of investors for \$1.3 billion (Bagli, 2007a). The event initially appeared to be just another privatization bid to extract the collective wealth built by the long-dead social-welfare city whose obituary was written in the 1970s (Gifford, 1978). The winning team had triumphed in a bidding war for the poster child of the nanny state: not only does the State of New York hold a \$234.4 million mortgage on the property (interest free), but the complex has its own schools, churches, synagogues, shopping center, and armed security force (Bagli, 2007a). Thanks to generous tax abatements, the interest-free mortgage, and Section 8 subsidies, Starrett City's former manager declared "This was the most profitable tax shelter in history." (Vitulo-Martin, 2007). But if the strategy of privatization was clear, the tactical moves soon proved more complicated. Tenant organizers from ACORN tapped into the growing public recognition that bidding wars for affordable, subsidized developments provided a sensitive barometer of future pressures for displacement by any means necessary; the morning after the deal was signed, ACORN organizers were busing tenants to protest at the offices of the partnership led by David Bistricher and Sam Levinson that won the deal. Bistricher and Levinson soon

had to confront the uncomfortable fact that cosmopolitan liberalism is not quite dead after all: given the web of remaining subsidies, any sale requires the approval of both the State and federal governments. Advocates found an ally in Andrew Cuomo, onetime Clinton Administration HUD Secretary, who met with Bush Administration HUD Secretary Alphonso Jackson at Starrett City; Cuomo made clear his intention to enforce a lifetime injunction that was imposed on Bistricher in 1998 by a state court banning him from co-op or conversion transactions anywhere in the State of New York (Bagli and Newman, 2007; Cuomo, 2007). Bistricher found few allies in the midst of the public outcry: even Mayor Michael Bloomberg “all but called Mr. Bistricher a bad landlord with a ‘worrisome’ history of building violations” (Bagli, 2007b). In early March of 2007, HUD Secretary Jackson rejected the proposed sale, but his letter “left open the possibility that the deal could be revived,” (Bagli, 2007b).

Bistricher may well have been justified when he claimed that his “public lashing” was an unfair penalty for a series of political mistakes. But the public struggles over profits versus affordability were soon overtaken by a rapid deflation of the housing and credit bubbles that had offered such lucrative speculation opportunities for so many years. In early 2008, the current owners of Starrett City reached an agreement with New York Senator Charles Schumer and city and state officials to ensure that any prospective sale would not undermine the development’s affordability status for moderate-income renters. As the global financial crisis weakened the housing market, the climate changed for the second attempt to sell the complex: bids came in much lower (with a nonprofit consortium bidding \$700 million in December, 2008), but in contrast to the current crisis

of the private speculative market, a Starrett City deal is only possible “because the rents there are close to market rate and effectively guaranteed by government subsidies.” (Bagli, 2008).

Our purpose in sketching this vignette and the others, is not to narrate a clear plot of victory or defeat for any particular movement. Rather, we wish to emphasize the simple but often-overlooked point that public housing comes in many forms. It is a crucial part of many different kinds of neighborhoods across the City. The character of assisted housing in different communities is an ongoing struggle over the permissible bounds of profit in the face of evolving crises of affordability. This is a struggle over what category each of these neighborhoods on the map will be, and it is an intergenerational narrative. Three decades before Andrew Cuomo’s (2007) letter helped to sidetrack the Starrett City sale, his father Mario negotiated an end to the bitter rent strike of 1975-1976 and the elderly co-operators’ fears of mass evictions (Frazier, 2006).

## **Conclusion**

American popular discourse and public policy equate “public housing” with the failures of American urban liberalism, and assume that deconcentration will break the link between housing assistance and the concentrated poverty associated with a dangerous “underclass.” Our evidence provides no support for the claim that tenant-based vouchers promote poverty deconcentration. Even after accounting for racial segregation and spatial autocorrelation, vouchers have a stronger link to local poverty rates than all other types of federal low-income housing assistance -- including the much-

maligned category of traditional public housing. Moreover, a comprehensive map of housing assistance reveals considerable diversity in the kinds of public subsidies that sustain so many different poor, middle-class, and wealthy communities in the metropolis. Once we recognize its varied forms, it becomes clear that public housing is everywhere.

For many years, a small group of critical housing scholars have worked to make this point (e.g., Dolbeare, 1983; Dreier, 2006; Marcuse, 1995). These critical voices were marginalized during the repeated long booms of increased homeownership and housing wealth accumulation in the late 1980s, the late 1990s, and then the dramatic years of this decade. Beginning in early 2007, however, the collapse of a housing boom that had been transformed by a deregulated explosion of risky mortgage and securitization networks began to drag the United States and the rest of the world into the worst financial crisis since the Great Depression. The last year of the Bush Administration brought a machine-gun barrage of bank bailouts, the virtual disappearance of the profitable deregulated model of Wall Street investment banking, an \$85 billion rescue of the world's largest insurance company, a \$200 billion takeover of Fannie Mae and Freddie Mac and government assumption of their \$5 trillion mortgage guarantees, a \$700 billion plan to buy "troubled assets" from banks, and an expansion of the Federal Reserve's balance sheet as more than \$1.3 trillion was pumped through various channels into financial institutions. By March, 2009, new federal commitments to stabilize financial markets exceeded \$9 trillion. (By contrast, even with significant increases for vouchers and project-based rental assistance, Obama's proposed HUD budget for fiscal 2010 is only \$47.5 billion, and the sole mention of "public housing" in the HUD budget summary



entails a “Choice Neighborhoods Initiative” for investments in high-poverty areas).

Massive bailouts of institutions that had stripped profits out of communities during the good times -- especially those involved in the abusive subprime market targeting low-income and racially marginalized borrowers -- have fueled rising anger and frustration. Just as the welfare state of the 1970s could be attacked with the symbolism of the Cadillac-driving “welfare queen” frequently mentioned in Ronald Reagan’s speeches, today’s crisis of capital might best be summarized with a simple discursive equation: “Banker + Gangster = Bankster” (BBC, 2009).

As the crisis worsened in the first months of the Obama Administration, debate in Washington finally turned to the logical, reasonable, and thus un-thinkable option of nationalization. The worst housing and credit climate since the Great Depression is now making it clear that housing wealth is fundamentally a social, collective asset, capitalized through enormous public investments in location, accessibility, and centrality. For many years, the accumulation of housing assets has been understood only in private, individualized terms. But as soon as public housing is properly defined -- to include suburban McMansions and elite Manhattan apartments as well as poverty-ridden projects -- we have an opportunity to reclaim our shared rights over the collective social creations of housing, and indeed of urbanization itself.

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**Table 1.** A Snapshot of Housing Affordability in New York City, 2005.

	2005	Change in housing units 2002-2005
Total available housing stock <sup>1</sup>	3,124,144	+43,371
Available rental housing stock	2,092,363	+7,594
	<i>Percent of all rental</i>	
Rent controlled	43,317	2.07
Rent stabilized, pre-1947	747,332	35.72
Rent stabilized, post-1947	296,345	14.16
Private non-regulated	697,363	33.33
Occupied Mitchell-Lama	58,944	2.82
Occupied public housing	167,539	8.01
All other rental units <sup>2</sup>	81,523	3.90
	2,092,363	100.0
Gross rent-to-income ratio:	31.2	+2.6
Proportion of households paying more than 50 percent of household income for gross rent	28.8	+3.3
Households reporting federal Section 8 assistance <sup>3</sup>	130,921	+11,786
Excess population in severely overcrowded housing units <sup>4</sup>	79,451	
Homeless population (low estimate) <sup>5</sup>	40,293	
Total households without adequate housing <sup>4</sup>	46,233	
Families on waiting list for conventional public housing	142,000	
Families on waiting list for Section 8 <sup>6</sup>	123,126	

*Notes*

1. Available housing stock excludes units classified as 'vacant unavailable' or 'vacant dilapidated.'
2. Includes In Rem, Article 4, Loft Board, and vacant Mitchell-Lama or public housing.
3. NYCHA (2006, p. 13) reports "approximately 90,500."
4. For details on definitions and methods, see Been et al. (2006, pp. 9-12).
5. Lower bound estimate from the Homeless Outreach Population Estimate survey; see Been et al. (2006), p. 9.
6. Although now officially named the Housing Choice Voucher (HCV) program, many local authorities continue to refer to "Section 8" to avoid confusing tenants and applicants (see NYCHA, 2006, p. 3).

*Sources: Lee (2006), Been et al. (2006), U.S. Bureau of the Census (2003, 2006), NYCHA (2006).*

**Table 2.** Clustering and Concentration of Assisted Housing Types.

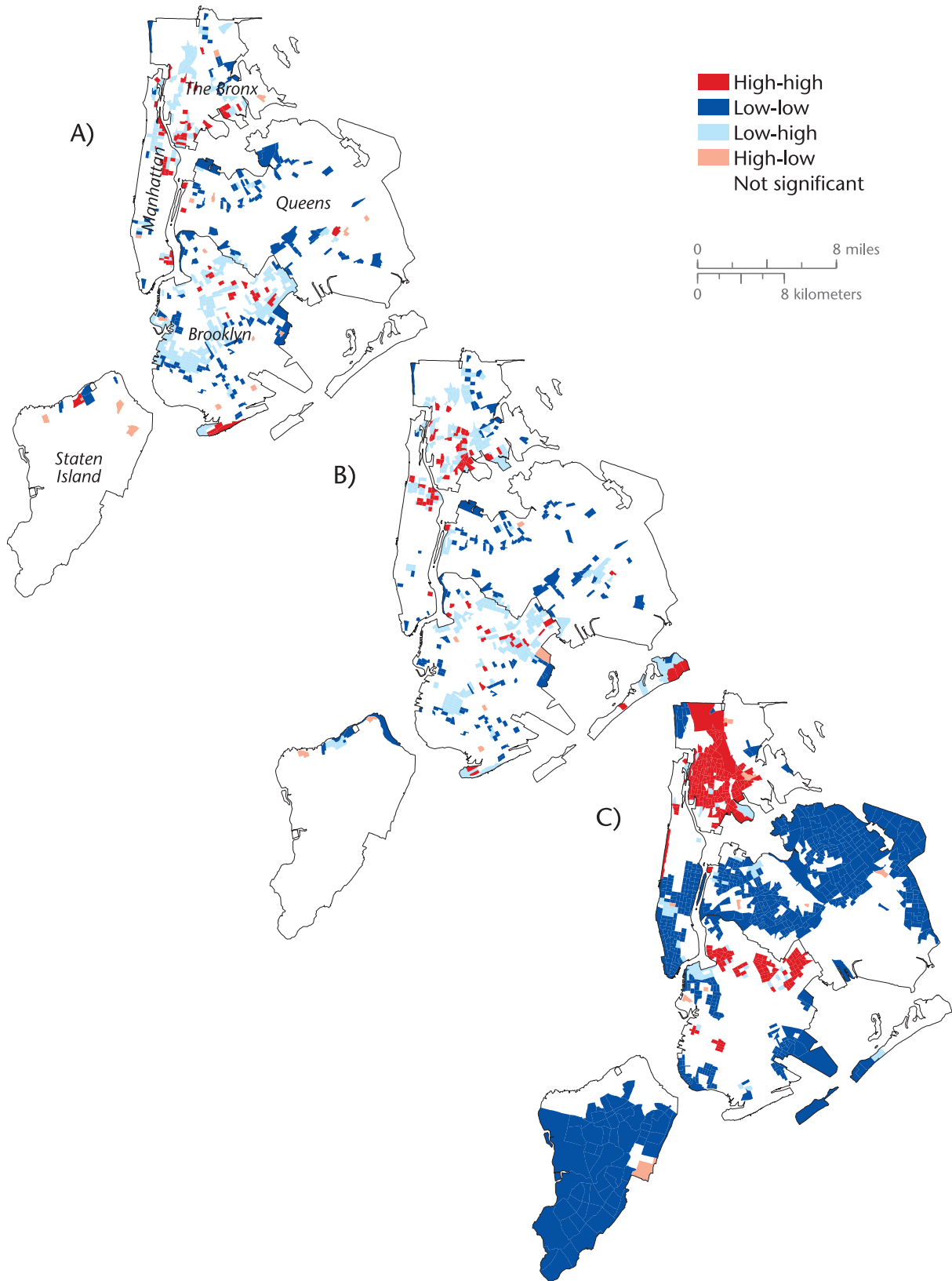
LISA Cluster type <i>(assisted housing vs. extreme poverty)</i>	Public		Active project-		HCV		LIHTC	
	Housing	%	based Section 8	%		%		%
High-High (red)	52,832	29.3	25,691	34.6	38,521	41.3	9,191	31.3
Low-Low (blue)	482	0.3	-	-	2,405	2.6	1,435	4.9
Low-High (cyan)	545	0.3	-	-	785	0.8	272	0.9
High-Low (pink)	17,205	9.5	7,290	9.8	2,032	2.2	429	1.5
Not significant at P<0.05	108,904	60.4	41,280	55.6	49,318	52.9	18,063	61.5
Excluded (tract < 25 persons)	464	0.3	-	-	133	0.1	-	-
Totals	180,432	100.0	74,261	100.0	93,194	100.0	29,390	100.0

**Table 3.** Spatial Models of Poverty and Assisted Housing.

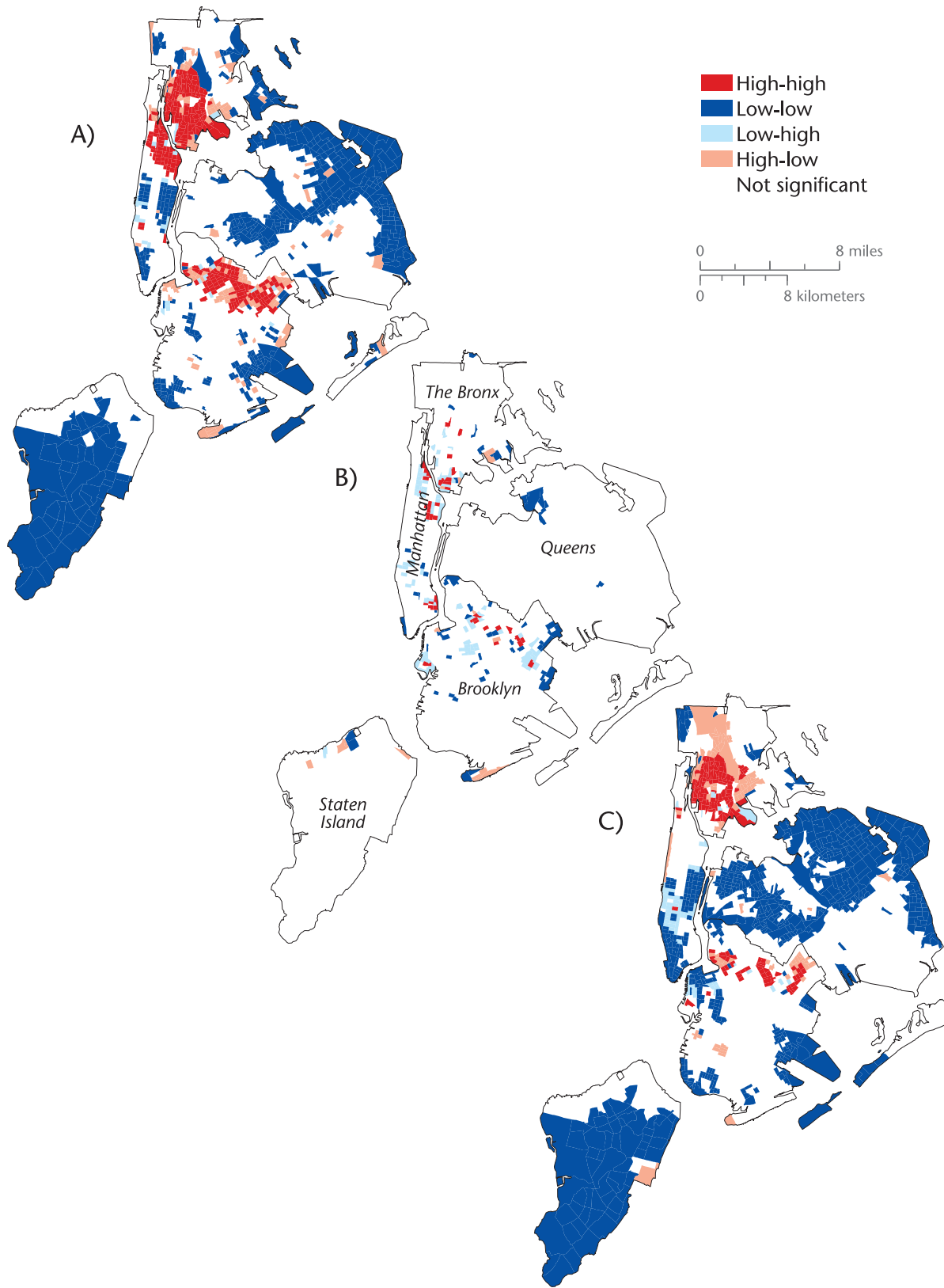
	OLS			Spatial Lag	Spatial Error	GWR			
	Coefficient	Standardized Coefficient	Squared semi-partial type I	Coefficient	Coefficient	Median Coefficient	Minimum	Maximum	Monte Carlo Significance
Intercept	0.0641 ***			0.0108 *	0.0593 ***	0.0521	0.0055	0.0999	0.0000 ***
Non-Hispanic Black population	0.1186 ***	0.2712	0.0573	0.0592 ***	0.1881 ***	0.1374	0.0542	0.2762	0.0000 ***
Non-Hispanic Asian population	0.0703 ***	0.0656	0.0093	0.0532 ***	0.1023 ***	0.1155	-0.0427	0.2736	0.0100 **
Hispanic population	0.2897 ***	0.4718	0.3370	0.1427 ***	0.3091 ***	0.2596	0.2289	0.3737	0.0400 *
Public housing	0.0610 ***	0.1473	0.0233	0.0437 ***	0.0307 ***	0.0960	0.0286	0.1643	0.6100
Active project-based units	0.1199 ***	0.0781	0.0092	0.0375	0.0790	0.1327	-0.0123	0.2368	0.1400
HCV households	0.6296 ***	0.2790	0.0686	0.2517 ***	0.1220 ***	0.5994	0.2998	1.6657	0.0100 **
LIHTC units	0.0574 ***	0.0434	0.0018	0.0778 ***	0.0677 ***	0.0716	-0.0227	0.4836	0.7500
Spatial Lag (Rho)				0.6067 ***					
Spatial Error (Lambda)					0.7185 ***				
N	2,155			2,155	2,155	2,155			
Adjusted R-square	0.5049					0.6111			

\*Significant at P<0.05; \*\*P<0.01; \*\*\*P<0.001.

Notes: Spatial lag and spatial error models estimated with first-order queen contiguity spatial weights; GWR model estimated with adaptive kernel, AIC minimization (convergence at 1.259 local sample points).

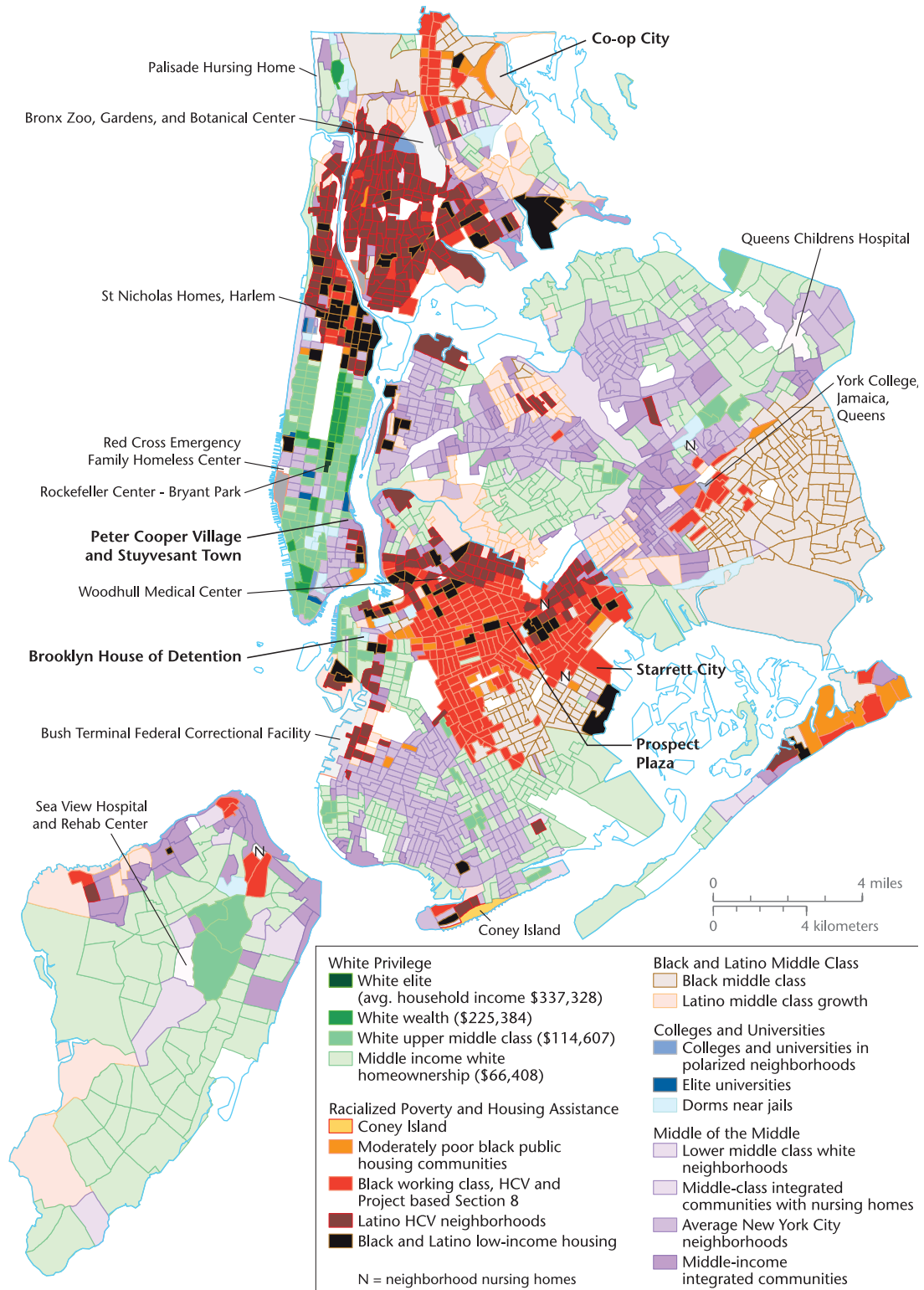


**Figure 1.** Poverty Concentration, Public Housing, and Vouchers. Bivariate LISA maps, showing **A)** extreme poverty rate and public housing share. In tracts shaded solid red, high standardized shares of public housing are significantly correlated with high standardized rates of severe poverty in surrounding tracts; in solid blue tracts, low shares of public housing are correlated with low rates of severe poverty in surrounding tracts. **B)** Extreme poverty rate and active project-based assisted housing. **C)** Extreme poverty rate and housing-choice voucher recipients. Significance level,  $P < 0.05$ ; severe poverty defined as the proportion of persons living in households with incomes less than 50 percent of the poverty level; spatial weights matrix based on six nearest neighbors; test for spatial randomness based on 999 iterations. Cartography by Eric Leinberger, University of British Columbia.



**Figure 2.** Poverty Concentration, LIHTC Housing, Public Housing, and Vouchers. Bivariate LISA maps, showing **A)** extreme poverty rate and LIHTC housing share. In tracts shaded solid red, high standardized shares of severe poverty are significantly correlated with high standardized rates of LIHTC housing in surrounding tracts; in solid blue tracts, low shares of extreme poverty are correlated with low rates of LIHTC housing in surrounding tracts. **B)** LIHTC housing share and public housing share. **C)** LIHTC housing share and housing-choice voucher recipients. (Definitions and specifications are the same as those for Figure 1). Cartography by Eric Leinberger, University of British Columbia.





**Figure 3. Public Housing in New York City.** Widely misunderstood as limited to poverty-ridden “projects” built, owned, and operated by governmental agencies, “public housing” is properly defined as any segment of the housing market that receives major public subsidy. Using a database of neighborhood indicators for demographic conditions and housing market characteristics, we developed a classification of New York City’s communities according to the kinds of public assistance they receive. See text for further details. Cartography by Eric Leinberger, University of British Columbia.